

## ABSTRACT

The invention relates to methods and apparatuses for manipulating small amounts of solids. Specific embodiments of the invention are particularly suited for the automated transfer of small amounts of solids. In one embodiment, a uniform powder bed is lightly compressed into plugs of powder and dispensed. In another embodiment, the solid is placed in a liquid carrier to form a slurry, dispensed, and the liquid component is subsequently removed. In yet another embodiment, solids are manipulated using adhesive surfaces.